**Day 15**

**What to do?**

Learn about Dropout Layer.

**Dropout Layer:**

Dropout is a technique in neural networks that help from a model to overfit. It randomly drops hidden neurons temporarily from the network. Along with the units, the incoming and the outgoing connections are also terminated, like shown in the figure.

To remove the neuron, a threshold value is set for each neuron at every layer that helps decide whether to keep the node or to remove it. For example, if the threshold was set at 0.6, all the neurons whose activation values are greater than or equal to 0.6, will not be removed, and all other nodes will be removed.

Dropout regularization helps diminish the network, which helps spread out weights of the network. A network can also have different thresholds for different layers. The only disadvantage of the technique is that the cost function will not be well defined due to random drop of neurons every time the model is run.

